wherein the value R of the resistance being equal to  $\rho L/\ell e$ , the value of the length L, width  $\ell$ , and the thickness e being defined such that a mass of the flat conductor can resist electrical arcing up to 300°C.

## 18. (Amended) A high voltage resistance, comprising:

at least one support and a flat conductor with length L, width  $\ell$  and thickness e fixed to the support and with a given resistivity  $\rho$ ,

wherein the value R of the resistance being equal to  $\rho L/\ell e$ , the value of the length L, width  $\ell$ , and the thickness e being defined such that a mass of the flat conductor can resist electrical arcing up to 300°C,

wherein said resistance is folded on itself.

Please add new Claims 31 and 32 as follows:

## 31. (New) A high voltage resistance, comprising:

at least one support and a flat conductor with length L, width  $\ell$  and a thickness e fixed to the support and with a given resistivity  $\rho$ ,

wherein the value R of the resistance being equal to  $\rho L/\ell e$ , the value of the length L, width  $\ell$ , and the thickness e being defined such that a mass of the flat conductor can resist electrical arcing, and

wherein the flat conductor is in the shape of a coil.

## 32. (New) A high voltage resistance, comprising:

at least one support and a flat conductor with length L, width  $\ell$  and thickness e fixed to the support and with a given resistivity  $\rho$ ,

wherein the value R of the resistance being equal to  $\rho L/\ell e$ , the value of the length L, width  $\ell$ , and the thickness e being defined such that a mass of the flat conductor can resist electrical arcing,